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JANUARY–FEBRUARY 1989
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FRONT COVER ILLUSTRATION BY
MARJ MASTRO
Marj Maestro has contributed many illustrations for California Garden.
She is retired from San Diego Schools.

For ten dollars a year, a garden club may become an affiliate member of San Diego Floral Association. This entitles the club to a year's subscription to California Garden, to be listed as an affiliate member in each issue of the magazine, showing name of president, phone number, address, place of meeting and time of meeting. It also provides one free ad per year, space permitting, in the magazine. Affiliate members are responsible to keep us informed of any changes in their listing.

For only $25.00 a year, a professional business relating to horticulture can become a member of San Diego Floral Association and be listed in each issue of California Garden magazine as a "Professional Affiliate". This listing would include name, address and telephone number of the business. It is a wonderful opportunity to reach gardeners.

Camera-ready garden related advertising may be placed in California Garden at the following rates:

SIZE	ONE-TIME	THREE TIMES	SIX TIMES
1-inch	$10.00	$ 9.00 each	$ 8.00 each
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Full page	$75.00	$65.00 each	$50.00 each
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Elizabeth B Glover, Editor

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HORTICULTURE CALENDAR

*San Diego Floral Association Event

***CONTEMPORARY FLOWER ARRANGING CLASSES AND BASKETRY CLASSES** sponsored by San Diego Floral Association are being scheduled this year. Call Marie Walsh, (619) 292-5182 to get on her mailing list for schedules, if interested in attending. Dates have not been firmed yet.

***FREE FLORAL CRAFTS INSTRUCTION WORKSHOP** each Thursday 10-3 p.m. in San Diego Floral Library, Room 105, Casa del Prado, Balboa Park. If you are creative, and wish to participate, come each Thursday to Floral Office. Info: 232-5762.

December 18

Christmas Concert by the Palos Verdes Symphonic Band in a medley of Christmas songs played by a 50 member orchestra conducted by Richard Schwalbe, South Coast Botanic Garden, 26300 Crenshaw Blvd., Palos Verde Peninsula.

***January 3, 1989**

Rose Parade Float Tour. Board bus at 7:45 a.m. in back of Balboa Park organ pavilion parking lot. Leave 8 a.m. Lunch (on own) at Beatles. Return about 5:30 p.m. Members $15, non-members $17. Contact Barbara Pruyne, (619) 561-2436 for reservations.

January 4 - February 2

Artist of the Month. Members of the Descanso Gardens Guild will present their works. A variety of media and styles will be used to depict landscapes, flowers, and animals. All artwork will be for sale. Descanso Gardens, 1418 Descanso Drive, La Canada Flintridge. 9-4 p.m.

January 8

Rose Pruning. Consulting rosarians will give a lecture and hands-on demonstrations on rose care. Pruning equipment will be for sale. South Coast Botanic Garden, 26300 Crenshaw Blvd., Palos Verdes Peninsula. 2 p.m.

January 14

Rose Pruning. Superintendent George Lewis and other gardeners will give hands-on rose pruning demonstrations. In the old-fashioned rose garden, visitors can prune climbing roses, floribundas, and hybrid teas. Questions on pruning and rose care will be answered during the demonstration. Descanso Gardens, La Canada Flintridge, 1-4 p.m.

January 16-19

The International Garden Trade Fair (VTB) 89 will be held in the Royal Jaarbeurs Exhibition Centre in Utrecht, Holland.

January 18

Wildflowers slide show by Robert Sewell. It will use two projectors with background music. Descanso Gardens, La Canada. 2 p.m. Show admission $3.00. A combination ticket for $10 includes a soup, salad and dessert luncheon as well as the slide show.

January 22

Origami Festival. Volunteers from the West Coast Origami Guild will demonstrate the Japanese art of folding paper to create flowers, birds, boxes, boats, and animals. Visitors are welcome to join in as demonstrators from the ages of 8 to 80 give classes in beginning, intermediate, and advanced origami techniques. Noon - 4 p.m. South Coast Botanic Garden, Palos Verdes Peninsula.

January 26, 27

Xeriscape '89 annual conference sponsored by the Cuyamaca Botanical Society and the San Diego County Water Authority, at Casa del Prado, Balboa Park, San Diego. For information and vendor kits, contact Jan Tubiolo, Xeriscape '89 Coordinator, Cuyamaca College, 2950 Jamacha Road, El Cajon, CA 92019. (619) 670-3544.

January 28-29

Camellia Show sponsored by the South Coast Camellia Society. More than 200 camellias ranging from large, ruffled informal blooms to petite, formal dahlia-shaped ones can be seen in shades of red, pink, and white. Members will answer questions on planting and care of camellias. South Coast Botanic Garden, Palos Verdes Peninsula. Sat: 1-4:30 p.m., Sun, 11-4:30 p.m.

January 28-29

Bonsai Show. Frank Nagata, one of the first California bonsai teachers and a founding father of the California Bonsai Society, will be honored at the ninth memorial "Winter Silhouettes" show by Baikoen Bonsai. Leading bonsai masters will exhibit deciduous trees such as maples and liquidambars as sculptured miniature trees. The Asikeki Kai club will display viewing stones called "suiseki". Harry Hirao, a leading bonsai master from Huntington Beach, will be the featured exhibitor. Demonstrations will be held daily at 1 p.m. and 3 p.m. Los Angeles State and County Arboretum, 301 N. Baldwin Avenue, Arcadia. 10-4:30 p.m.

January 29

Bulb Sale. Gladiolus enthusiasts are encouraged to come early to the annual bulb sale sponsored by the Southern California Gladiolus Society. Shoppers can choose from more than 2,000 bulbs in a rainbow of colors and styles. Exotic, bi-color, tri-color, ruffled, and show bulbs will be sold to benefit the society's June show. Members will provide literature and information on planting and caring for gladiolus bulbs. Los Angeles State and County Arboretum, Arcadia. 9 a.m. until sold out.

February 2-5

National Direct Marketing Conference and Farm Conference '89 at the Oakland Hyatt Regency and Oakland Convention Center in Oakland, Cal-

ifornia. Conference begins Thursday morning with farm and market tours. Over 50 exhibitors will display equipment and materials. Seventy workshops and eight special presentations are planned. Trade show will be open from noon Friday till 11 a.m. Sunday. Info: (916) 445-8614.

February 3–March 2

Artist of the Month, Louise Forbes, uses oil on wood to depict animals, flowers, birds and the seashore. Layers of transparent glaze give a three dimensional effect to the painting on the natural ash panels. Hanging stained glass designed by Ms. Forbes will be on display. Sponsored by the Descanso Gardens Guild. Descanso Gardens, La Canada Flintridge 9 a.m.-4 p.m.

February 4–5

San Diego Camellia Society's 42 Annual Show, Room 101, Casa del Prado, Balboa Park. Sat: 1-5 p.m.; Sun: 10-4 p.m. Free.

February 4

"Fashions and Flowers" looking back 100 years. Mr. Carnell Kirkeeng of Fallbrook will present his collection of antique fashions highlighted with flowers of the era. Sale items, such as containers by local potters, and plants, will also be available. Sponsored by the Village Garden Club of La Jolla. San Diego Princess Hotel (formerly Vacation Village), 1404 West Vacation Road, San Diego. 11 a.m.-3 p.m. Admission $25.00. Donation includes luncheon. For information and tickets contact Glenn Haugh, P.O. Box 1647, Rancho Santa Fe, CA 92067. (619) 756-1708.

February 5

Native Plants and Wildflowers lecture and slide show by Fred Braden, President of the South Coast Chapter, Native Plant Society. He will discuss how wildflowers can be used in the home garden, and use and care of native plants, trees, shrubs, and perennials. South Coast Botanic Garden, Palos Verdes Peninsula, 2 p.m.

February 11

Rose Seminar sponsored by the Descanso Gardens Guild. In this all-day session, four leading rosarians cover the topics of growing old-fashioned roses, choosing new roses, understanding soils and fertilizers, and overcoming insects and fungi. Cost: $25.00. A $6.50 lunch can also be purchased. Reservations: Call Guild Office (818) 790-5414. Descanso Gardens, La Canada Flintridge. 8:45 a.m.-3 p.m.

February 11–12

Camellia Show. The 41st annual Temple City Camellia Society show and competition will feature more than 2,500 flowers in an assortment of colors. Japonicas, reticulatas, and non-reticulatas will be featured in 40 categories. Amateur growers are encouraged to enter their flowers in the novice competition. Members will answer questions on camellia care. Call Sergio Bracci at (818) 286-4338 for more information.

February 12

Fuchsia Care. Ida Drapkin, expert on fuchsias, will discuss planting, feeding, watering, and pruning of these shade-loving plants. She will also demonstrate on fuchsia pruning to visitors who are welcome to bring in their fuchsias for pruning. South Coast Botanic Garden, Palos Verdes Peninsula. 2 p.m.

February 18

Orchid and Specialty Plant Sale. Third annual sale benefits the Los Angeles State and County Arboretum and the California Arboretum Foundation. Sale will feature more than 1,000 exotic plants and orchids including unusual orchids, fruit trees and palms sold at bargain prices. A new type of cordyline called "Kiwi" that has tricolored foliage and improved resistance to mites will be available. Blooming orchids, aromatic ginger, hibiscus, and lobster claw flowers (heliconias) will be for sale. Los Angeles State and County Arboretum, Arcadia. 9-4 p.m.

February 18–19

San Diego County Orchid Society's Mini-show and Sale. Room 101, Casa del Prado, Balboa Park, San Diego. Sat: noon-4:30 p.m.; Sun: 10-4:30 p.m. Free.

February 19

Ground Covers. Expert Horticulturist from the Palos Verdes Begonia Farm, Eleanor Barker will discuss the many alternatives to turf. Slides will illustrate different uses of vines, shrubs, water thrifty plants, and herbaceous plants as ground covers. South Coast Botanic Garden, Palos Verdes Peninsula. 2 p.m.

February 21

***San Diego Floral Association Dinner and Meeting.** Room 101, Casa del Prado, Balboa Park. 5:30 social hour; 6:00 p.m. pot luck, 7:30 Irina Gronberg, artist, teacher, and master gardener, will bring some of her art, and talk about art and her garden. Reservations not required. Bring a dish and enjoy the evening.

February 24–26

International Symposium on Bulbous and Cormous Plants sponsored by The American Plant Life Society and University of California at Irvine Arboretum. This will be a 2½ day symposium devoted to the botany, culture, and hybridization of bulbous and cormous plants. It will be held in Irvine. For registration information write to: Prof. Harold Koopowitz - ISBC, UCI Arboretum, University of California, Irvine 92717.

February 25–26

Camellia Show. Admire more than 2,500 camellias. More than 40 categories of camellias such as reticulatas, non-reticulatas and japonicas in a variety of sizes can be seen. Questions on camellia care will be answered. Descanso Garden, La Canada Flintridge. Sat: 1-4:30 p.m.; Sun: 9-4:30 p.m.

February 25–26

African Violet Show. The South Coast African Violet Society will present "Violets in Concert" with roughly 140 African Violets on display. Members will answer questions and give demonstrations on care throughout the day. African violets, pots, and other material will be sold. South Coast Botanic Garden, Palos Verdes Peninsula. Sat: 11-4 p.m.; Sun: 9-4 p.m.

February 26

Mushroom Fair. The Los Angeles Mycological Association encourages show visitors to bring in their mushrooms for identification as poisonous or edible. Clay models and dioramas will show the natural habitat of more than 150 species of mushrooms. Members will answer questions, show slides, and give cooking demonstrations. Books and T-shirts will be for sale. Los Angeles State and County Arboretum, Arcadia. 10-4 p.m.

March 4-5

San Diego African Violet Society's 8th Annual Show and Sale, Room 101, Casa del Prado, Balboa Park. Sat: 1-5 p.m.; Sun:10-4 p.m. Free.

March 5

Palomar District of California Garden Clubs, Inc. Annual Fund Raiser: Wine and Tea Party and a Gala Art Auction, Soledad Club, 5050 Soledad Road, San Diego, CA 92109. 2 p.m. Information: (619) 748-6324.

March 8-9

Green Show '89, the only annual industry-wide trade show for the entire San Diego area will double its space for the 1989 show in the Bing Crosby Hall and the Pat O'Brien pavilion at the Del Mar Fairgrounds. Vendor spaces available. Contact Jan Tubiolo, Coordinator, Cuyamaca College, 2950 Jamacha Road, El Cajon, CA 92019. (619) 670-3544. Hosted by the Cuyamaca College Botanical Society.

March 12

Professional Women's Horticulture and Landscape Association's Show, Room 101, Casa del Prado, Balboa Park. Free.

March 17, 18, 19

San Diego County Orchid Society's 43rd Annual Orchid Show, "Orchids for all Seasons", at the Scottish Rite Memorial, 1895 Camino del Rio South, San Diego (South side of Hwy. 8 between Mission Center Rd. and Texas Street, across from May Co. in Mission Valley). Fri. Show Preview 6-10 p.m.; Sat: 9-9 p.m.; Sun: 9-5 p.m. Admission Charge. Plant Sales.

March 18-19

Ikebana International's 21st Annual Exhibit and Show, Casa del Prado, Balboa Park. 11-4:30 p.m. Free.

March 22

"An Eye for Beauty" photographers' seminar sponsored by the Village Garden Club of La Jolla at Casa del Prado, Room 101, Balboa Park, San Diego. Mr. William T. Bode, award winning photographer from Sacramento, will share his 30 years of experience covering techniques of lighting, choosing proper photographic equipment and backgrounds. This is a seminar for floral designers who have wanted to capture the beauty of their arrangements forever. Admission includes luncheon donation. 10-2:30 p.m. Information: contact Jo Ann Gould, 2111 Rachael Ave., San Diego, CA 92139. (619) 475-8996.

March 25-26

Exotic Plant Society's 11th Annual Show, Room 101, Casa del Prado, Balboa Park, San Diego. 11-4:30 p.m. Free.

April 13-16

Lakeside Western Days, Lindo Lake Park, Lakeside CA. Continuous entertainment and amusements, live music, sporting events, arts/crafts and commercial exhibits, and annual parade on Saturday, April 15. Free admission. Booths available for arts/crafts and commercial exhibits. Information contact Lakeside Chamber of Commerce, 9748 Los Coches, Suite 6, Lakeside, CA 92040. (619) 561-1031.

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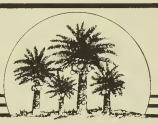

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Floral Library

The Master Gardeners Association of San Diego has given the SDFA Library a facsimile copy (published 1975 by Dover) of Thomas Johnson's The Herbal, or, General History of Plants. This book was originally written by John Gerard in 1597; it was revised and enlarged by Thomas Johnson in 1633. Users of the library can read a contemporary account of Renaissance botany, written in Elizabethan prose and illustrated with authentic woodcuts.

REMEMBERING JO WESTHEIM

Josephine Westheim, associate editor of California Garden Magazine, Past President and director of San Diego Floral Association, Founder and first President of La Jolla Village Garden Club, was well known in Eastern floral organizations before coming to California.

Mrs. Westheim, noted among her peers as a talented flower arranger, generously shared her talent and expertise with anyone interested in creating artistic arrangements.

The editorial staffs of the magazine deeply appreciated her encouragement and her many behind-the scenes contributions, which she gave so graciously.

Her dedication to the advancement and appreciation of floral beauty has become a part of the heritage of the organizations that were fortunate to have her as a member.

A.M. & S.C.

Basic Information About Bromeliads And Their Care

By Mary Siemers

Bromeliads are members of a large family of plants, the **Bromdiaceae** family. The best known member is the Pineapple. **Bromeliads** grow in the wild from the southern United States to Argentina. Some grow as epiphytes on trees, others grow as terrestials on the ground, while others are saxicolous and cling to the rocks.

Bromeliads are very hardy and extremely adaptable to most climates. They particularly like high humidity and tropical temperatures. They do exceptionally well in southern California.

The **Bromeliad** is an exotic plant with the beautiful tropical look all year around. Their brilliant long lasting inflorescence, and their colorful foliage make them a perfect ornamental plant for indoors to beautify your home, or outdoors to enhance your patio or garden landscape.

Bromeliads require relatively low maintenance, and the large variety of species and hybrids, all differ in color, shape, and flowers. **Bromeliad** collecting is a most interesting hobby.

CARE OF BROMELIADS

WATERING:

If outdoors, water about once a week (depending upon the weather). Water the soil, fill their center cup, and water the foliage, as they absorb the moisture through their leaves.

If kept indoors, empty their cups at least once a month to keep the water from becoming stagnant. Allow the soil to become almost dry before watering again. **Bromeliads** must never be allowed to become soggy.

FERTILIZING:

Fertilize during the warm months only. One of the recommended fertilizers is osmocote formula 14-14-14 spread over the soil every 3 months. In addition, you may use a water soluble fertilizer once a month, using only 1/2 of the recommended strength, over the foilage, the soil and their cup. (**Bromeliads** do not like fish emulsion).

LIGHT:

Most **Bromeliads** prefer filtered sunlight such as under a tree, shadecloth, lath, or any other material that will allow plenty of bright light, but not direct sun. However there are some species that prefer direct sun.

This information must not be reprinted without the permission of the author.

Beginning Orchid Growing In San Diego County

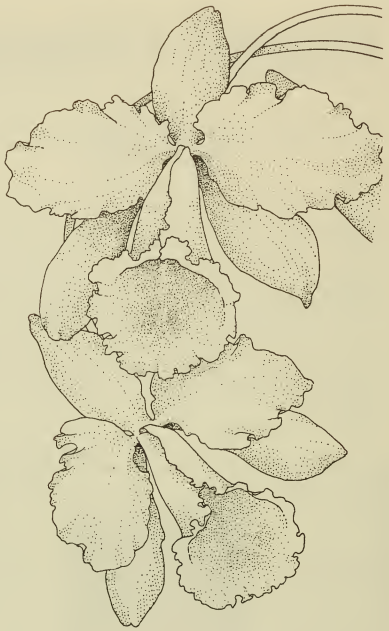
By Harry Tolen, Chula Orchids

Most of my orchid experience has come from the actual growing itself, and the experimenting with various factors to see if the plants will react more favorably. I have imported orchids for years, and I frequently request information from those sources regarding where they find them, and under the conditions they feel the best ones were found. I then try to apply this to the plants at my home.

Orchids can be found on every continent except Antarctica. There are types found growing in what we classify as cool, intermediate, or warm climates. There are species in Australia that grow and flower entirely underground.

Orchids for beginners are fairly easy to select here in San Diego area. Let's pretend you have just discovered orchids, and have finally looked me up in the yellow pages under "Orchid Growers".

You explain you have seen some orchids and have been attracted by them, but you really



don't have the first clue as to how to grow them. What can you grow and when can you see the flowers? Now you and I will play "Twenty Questions". I must find out where you live, and what growing conditions you can provide.

Knowing where you live will give me the high and low temperature, and the humidity, rainfall, cloud cover, etc. When you explain where you want to grow the orchids, I can recommend something that will have a real good chance of survival. You can be sure that I will make every effort to find something you will be successful with, because I want you as a customer. If you kill off the first orchid you buy, the chances that you will come back are not very likely. If, on the other hand, you are successful, I will have a customer forever. I usually explain to new owners, as they are leaving with their first orchid, the worst thing that can probably happen is for you to be successful with that first orchid, for then you are hooked for life. There are over 25,000 different species of orchids found in nature, and literally hundreds of thousands of hybrids, and you will probably want to grow them all before you are through.

With a little self control at the start of your orchid growing hobby, you will increase the odds of your being successful right from the start.

About the same time as you get your first orchid, you should look for a few basic instructions for growing it. This can be obtained from the grower, a friend, library books, or a multitude of orchid catalogs offered by growers from all

over the world. Books on orchids can be examined right here in the park. The San Diego Floral Association has some good books on orchids with lots of pictures. One I particularly liked was written in 1866 by Charles Darwin on how various orchids are pollinated. The Botanical Foundation has books in their library on orchids, and the San Diego County Orchid Society has a large library all its own here in the park. This is a very comprehensive library for orchids covering all aspects of growing.

As normal for any purchase in your lifetime, comparison shopping is essential. In San Diego the first move for a novice grower is to attend some meetings of the San Diego County Orchid Society. In your area contact the closest orchid society to you. Currently there are about 300 members in the San Diego County Orchid Society. We meet on the first Tuesday of every month in Balboa Park. Each meeting is like a small orchid show, attendance is usually 100 to 150 folks, and lots of them bring an orchid in bloom for show and tell. I want to stress that you do not have to belong to the Orchid Society to attend the meetings. They are open to all who wish to attend. If you like the company, and the information you receive by attending, you may join the Society for only $7.50 per year, and that includes receiving the San Diego County Orchid Society newsletter every month.

The folks who attend these meetings are very friendly and want to see you succeed with your orchids. Starting at 6:30, each meeting is a novice class which spends some time on the very basics of growing. This is an especially good class for the novice to attend, but you will find lots of the Society regulars there also. Each class will have a different instructor. You will find classes from repotting a cymbidium to how to protect against critters who think orchids are ice cream.

The June meeting featured one of the members, Peter Tobias, who related the joys and horrors of importing orchids from foreign countries. Tips were given on how to avoid pitfalls if you want to try this yourself.

Then the main meeting takes place. Because the San Diego Orchid Society is very large, you will find many opportunities to obtain plants at the meetings. There is a social period, coffee and goodies; the short obligatory business meeting, and then a guest speaker. Most of the time the speech is of an entertaining nature rather than a straight cultural monologue. It will take some orchid subject in depth and is usually very interesting to all.

The June meeting program was given by Mr. Ron Garrison. Ron is a photographer from the San Diego Zoo. Ron gave us many tips on how to improve our picture taking. He had "do and don't slides", and some camera equipment for us to examine.

After this a short break is taken. During this time many members will take the opportunity to participate in the monthly drawing for orchid plants. The Society buys several hundred dollars of orchid plants monthly and presents them on a plant table. All attendees are allowed to buy as many drawing tickets as they wish. After all tickets are purchased the drawing is held. A number is called, and the owner is allowed to go to the plant table and select any plant on the table. This continues until all the plants are taken.

Then there is a bonus drawing for those who purchase special drawing tickets, and budded, blooming, or other special plants are the prizes. Then another drawing is held among those folks who brought in plants to display at the show and tell. It is not unusual to see someone leave with five or six plants they have won.

During the social periods and the breaks you will find lots of people who really enjoy talking about orchids and their growing methods. So don't be bashful. Please attend if you are the least bit interested in orchids. I'm sure you will make more than one new friend at these meetings.

Once a year in March the Society puts on a super show. It's kind of the focal point of growing orchids because half the fun of having the orchids is being able to show them to soemone and listen to the oooooo's and ahhhhhh's. Two other times during the year the Society puts on a miniature show in Balboa Park. It's truly a braggin' show. You can talk to the other hobbiests about the art of growing just about any type of orchid you can think of. Genie Hammond is very successful with lots of types of orchids that folks will tell you are very difficult and can't be grown here. She has developed the techniques she uses with a great deal of trial and error, watching the plants and reacting to their reaction. Her results are truly amazing with these plants, and she does it out of doors in Chula Vista.

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Orchid Society and your local Society will be much the same format. Other Societies you will want to look into are: (1) The Orchid Digest, c/o Mrs. Norman Atkinson, P.O. Box 916, Carmichael, CA 95609-0916, (2) The American Orchid Society, 6000 South Olive Avenue, West Palm Beach, FL 33405-9974, and (3) The Cymbidium Society of America, c/o Mrs. Richard L. Johnston, 6881 Wheeler Avenue, Westminster, CA 92683. All issue superior publications full of color pictures of orchids and extensive articles for both the beginner and experienced grower concerning culture of various types of orchids. The Orchid Digest publication is the large 8 1/2 x 11" format, lots of information sent to you four times a year, lots of color, and advertisers. Currently The Orchid Digest is having a very special subscription offer. Normally $18.00 per year; if two of you sign up together the total cost is only $25.00, plus you each will get a $3.00 credit to any other of their publications, or it can be applied to next year's subscription.

If you like mainly cymbidiums you can join The Cymbidium Society of America, and receive the Orchid Advocate. This publication is issued four times a year, dues are $15.00 per year, and again the magazine is in color, and contains ads for sale of orchids.

The largest circulated publication is The American Orchid Society Bulletin to around 30,000 members from all over the world; truly an international society. It's in a smaller format, and is a must for an orchid grower. The American Orchid Society Bulletin is issued monthly. You will find articles for beginners (novices) and experienced growers alike, and lots of articles that are just really interesting reading. In the issues from this year are several multiple part articles on "Phalaenopsis for Beginners", and "Cattleyas for Beginners", articles on sightseeing (Orchids) in Brazil, Touring (Orchids) in South Africa, etc. You will find an excellent section on questions and answers, an orchid calendar for events around the world, and color pictures of orchids you never dreamed existed. The May issue this year had a letter asking about microwaving potting mix to sterilize it. The answer said yes, it's possible, but the aromas in the kitchen might not be appetite stimulators!!! The back half of the book is devoted to the advertisers. You will find over 150 advertisers from all over the world who will send you lists or catalogs. Many of these lists of catalogs are small orchid encyclopedias themselves. Many show fine color pictures, and include cultural information for each particular type. Some require deposits, but I have found the publication they send is well worth the money sent. Most will allow the cost of the catalog to apply to your first purchase, but many of these catalogs are worth the price even if you never purchase from the sender.

Don't be bashful here either. Send for that Taiwan or Thailand catalog, too. You will find out a lot about orchids, the postal service, and you will obtain some fine stamps for someone's collection. I have never had to throw any stamps away. They are always in demand.

Another method I will recommend is for you to examine your phone book yellow pages. There is a heading now listed as "orchid growers" in the yellow pages. See if any growers are in your area first, and visit them. This will give you some insight as to how cultural conditions are developed and improved for your specific area. Take some trips around and see what is available locally. You will be able to get some first hand cultural information from the grower. This will give you some good starting points for

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growing yourself. I say starting points, because even if the grower is next door to you, you will probably have some factors which will require a slight variation for growing in your yard or home. Experience is the best teacher.

Most of the year, here in paradise, you can grow hundreds of different kinds of orchids outdoors with just a little protection. It's the winter time that we have to make plans for. Some will simply move a small collection inside until the weather is more reasonable. Some live in areas like Point Loma or La Jolla where it is temperate enough to leave the plants right where they are with minimal chance for loss. Others will provide a greenhouse where temperature, humidity and light can be controlled.

There are two ways to approach orchid growing, one is to see an orchid and say "I'm going to grow that orchid no matter what I have to do". That may get you into some very technical equipment right away. Another way is to find out what will grow in your area with minimal care, and select from those plants for starters. Of course there is a third way. Have the gardener put up whatever he needs, to grow what you bring home, and bring the plants into the house when they are blooming.

Those of you who are currently growing plants outdoors under some protection will have the easiest time getting into orchids. If you have staghorns, you will find many orchids that will grow right alongside the staghorn with no difference in cultural requirements. Anyone who grows fuchsias, bromeliads, ferns, camellias, begonias, aroids. I could go on and on, basically, if you are a successful grower of plants, you will be able to find some orchid you can put alongside your existing plants, and it will do fine.

If you grow roses, try a cymbidium right alongside of it. My advice for cymbidiums is to water it when you water the rose. Fertilize it when you fertilize the rose. Give it the same sun until it's ready to bloom. Then bring it in to a shady area to make the blooms last longer. The cymbidium is a good plant for full sun, not near a wall, mind you, but out where the air circulates well. They are native to the Himalayan mountains, and they get lots of sun, wind, and rain, and they take cold down to around 25 degrees with no ill effects. Cymbidiums commonly flower between March and May, but many of the newest hybrids will flower in November. Others have been developed to flower through June. These will cost you much more than those flowering at the normal time. They are still very valuable from a cut flower standpoint, so the commercial growers want just about all they can get.

Suppose you grow African violets in your home, and are doing fine with them. First, I take my hat off to you. That is an accomplishment I haven't mastered. I think you will find orchids easier to grow than the African violets. They are not so touchy. You can squirt water on them from any angle. They are not at all fragile and

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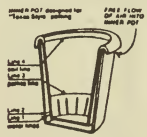

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will take a serious bump in stride, and they react very slowly to lack of water, or too much water.

There are many types of new "window orchids" you may try to grow alongside your African violets. An old standby is the moth orchid or butterfly orchid. The botanical name is **phalaenopsis.** A large mature plant can be in flower most of the year. The normal flowering season is springtime. It is a very rewarding plant to grow, and there is a multitude of information on growing them. I will say it is much easier to keep a strong mature "phal" alive than it is to start with a small seedling.

There is another reason for buying mature plants. First you can see the flower when you buy the plant, you know you like it, and you can see if you have any at home that resemble it. This will keep you from spending time growing plants that you eventually will not want to give the time to. You can grow an orchid seedling for four or five years, finally bloom it, and realize it's not something you like. Unbloomed seedlings are purely speculative, unknown flowers, unknown quality. It is possible to buy clones of awarded orchids, and they will be exact duplicates of the awarded plant, but they usually cost significantly more even as small plants.

So try to start off with a few mature plants, blooming if possible. See how you do with these, and then when your confidence develops, try a few small seedlings or meristems (clones). This way you can zero in on what does best for you, and what is the most rewarding.

So far I have talked about cymbidiums, the absolute easiest I can recommend, and probably the most available. Second was phals, the moth orchid, and now I will turn your attention to "species".

The easiest way to explain "specie" is that it is a jungle plant. If you pollinate a specie with its own pollen, you will get a couple million seedlings that look very much like the original. If you use another plant in the same species, the same thing will happen. If you pollinate a hybrid with its own pollen, you will get a couple million seedlings with a wide variation in color, shape, substance and size. All two million would be unknowns; you will have a general idea of the outcome, but you will get wide variations. The species are very predictable.

Although there are several native species to North America, and to San Diego county for that matter, most species are imported to this country from the native habitat. Unless you bring back just a few, you need a permit from the United States Department of Agriculture to import plants, and, as orchids are now on the endangered species list, you must also have permission from the government of the country you are getting them from.

Our quickest source here is the Mexican species. Many importers of Mexican species bring them into San Diego county, and distribute them

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to local growers. These plants seem to do well here with a minimum of effort. The climate is not that much different, and with a little effort on our part, we can supply what they need to bloom them easily. **Laelia anceps** is particularly easy to grow here. With some minor cultural requirements, it will grow and flower just about anywhere in San Diego county. The plant will make up its bloom spike starting in October or November, but will not mature and flower until December. Some will extend the blooming season into March. The flower is a large purple flower more like the corsage orchid you usually connect with the word orchid.

Can it grow in full sun? Yes, but it may require water twice a day in total, full sun. Will it grow in early morning and late afternoon sun? Yes, but under an aluminum patio roof it may require more light than that; under some shade cloth or lath it probably will not require anything the other plants are not getting in the same area. Will it grow in total shade? Again, yes, but, shade like up to 80% shade cloth, not total shade like a solid aluminum, or asphalt roof. Will it grow under a fiberglass patio? Again, yes, but only under white or obscure. The green and/or yellow fiberglass blocks out too much light, and sucks in too much heat, just the opposite of what the orchid wants, white or obscure let in all the light, but reflect the heat away from the plant.

Watering under all of these conditions is probably going to be once a day. You really must work this out for your conditions. I remember sending $2.00 to a firm for a booklet on growing **odontoglossums.** I was especially interested in the watering recommendations. Upon receiving my booklet, I finally found the watering instructions. "Watering. Be careful not to water too little or too much!" I want to try to give you a little better clue than that to go by, but it is difficult. Try to remember that drainage on any orchid is all important. Orchids in pots must have some planting mix that retains some moisture, but maintains aeration. These plants will only need water maybe once a week in the winter if outside, perhaps everyday in the summer. Plants that are mounted on cork slabs or tree branches will drain very well, and will probably require water most every day even in the winter, if they dry out before the next day. A prolonged period of wet can be worse than a prolonged period of dry. Let's see if I can explain that more graphically. It would probably only take a week to kill one of these, if left submerged in a pail of water, but if left hanging under shade cloth, it would probably take two months of no water to kill it, maybe more. So the moral is, if you are in doubt, grow to the dry side; overwatering probably kills more orchids than any other cause.

I don't want to confuse you too much, so that's it for plant recommendations. If you will only go to visit some of the local growers, you will discover many, many orchids that will grow in your conditons. As to things like fertilizers and potting mixes, you will find as many different combinations and instructions as there are growers. You will eventually develop your own set of favorites on these two growers. All I will say is orchids are much easier to grow than roses, African violets or fuchsias, so give them a try.

Harvey Tolen has an orchid nursery in Chula Vista called Chula Orchids.

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THE SYMPOSIUM AT BERKELEY — The Mixed Border

By Christine S. Wotruba

This is a review of the Mixed Border Symposium at Berkeley that I attended last September. The Friends of the University of California Botanical Garden at Berkeley sponsored this informal gathering of interested amateurs and professionals. The speakers were an expert group of authors and practitioners. There was Jane Brown, the English author whose expertise includes famous gardener Gertrude Jekyll. Eleanor McPeck, an east coast designer and author, spoke about Beatrix Farrand. There were U.C. horticulturalists Roger Raiche and Brett Hall who spoke about California native plants and Australian natives respectively. There were nursery owners of specialty nurseries: Judith Jones from Seattle talked about temperate ferns; Chris and Stephanie Tebbutt, trees and shrub experts from Mendocino county, spoke about flowering shrubs in the border; and Betty Ann Mech from Minneapolis spoke about her specialty, dwarf perennials. John Elsley, a consultant to Wayside Gardens and George W. Park Seed Company, talked about plant introductions, and Bob Perry, author, designer, and educator, explained his designs for Southern California.

Since this was a drought year through the state of California, many speakers emphasized the use of drought tolerant plants in landscape designs which promote a "dialogue between the client's wishes and the sensitivity to the environment." A great choice and range of plants was presented from the English border favorites to the newest hybrids along with newly rediscovered natives from xeriscape climates. All of the plants could add beauty and substance to the garden.

The experience of being presented all these new and beautiful choices of plant material was almost overwhelming. Throughout the slide lecture I made notes about colors, textures and size of interesting plants — my garden palette. My notes ended up reading like a rock gardener's textbook. I checked most of the low-growing ground covers and dwarf perennials that included prostrate native plants from California and Australia. From the Tebbutts' (both Chris & Stephanie) lecture, I discovered cascading **Genista lydia** and front of border sub-shrub **Daphne collina.** Both are great for Southern California climates. I also loved **Cytisus Battandieri's** silvery foliage. Again, the speakers recognized the importance of drought tolerant (xeriscape) plants for the future of California gardens.

The English tradition of using background shrubs in the border is exciting for the color and textures they can produce. And there is an approach to pruning shrubs and trees to fit into these borders. It is a very practical way of handling these plants. Any shrub that grows too tall in the background, and is out of proportion, can be pruned drastically — to the ground — each year for the needed effect. **Paulowia tomentosa,** usually a large tree, can be kept manageable for sake of its large textured leaves and mass effect by cutting it back by 2/3 each fall. The **Cotinus Goggygria** can be cut back to fit into any border planting as in the Hidecote "red" border. These woody plants are the backbone to the border and I'll try to remember that they should be considered first when designing the border.

Rock garden plants or dwarf perennials are my special interest. Betty Ann Mech, owner of Rice Creek Nursery, described dwarf perennials as plants which when fully grown stay under one foot in height, hug the ground, and whose flower is a large percentage of the plant. Their growth habits dictate their use; view them from the top or at eye level, tucked into rock walls or arranged in box-like trough gardens. The plant most intriguing was the creeping Phlox, a hybrid cross of the tall fragrant traditional border plant, and the low-growing drought tolerant western native type. The new plant is a vigorous, thick foliaged ground cover that is covered with flowers in the spring. She calls them the "standby" of the rock garden. Well, that is under midwest growing conditions, so I will have to experiment by growing them in Southern California this year.

Bringing drought tolerant plants into California from other dry areas of the world not only fits our climate, but also can broaden our palette. Australian plants are imported and grown experimentally in the California landscape by Brett Hall at the U.C. Santa Cruz Arboretum. Some of these plants cannot grow under our ordinary garden conditions, and determinations about which plants will make it, have to be considered. I thought **Grevillea lavandulacea 'Tanunda'**, an Australian sub-shrub, attractive. But my notes indicate that the grevilleas should not be fertilized with phosphorous. However, some grevilleas will grow in heavy soils and have a lasting showy flower. So I will have to research these plants a bit more before they can be planted in my borders. I'll go to see the Arboretum's display of heathers when I get up to Santa Cruz. They are things of beauty.

Great excitement and enthusiasm was the response from the group after Roger Raiche's presentation. He is in charge of the native plant section at U.C. Berkeley. He stated that California's magnificence can be understood by its plants and its flowers throughout the year. What we saw in the slides and then later in the walking tour of the garden proved his point. There is a "look" about California plantings that is loose and billowy, a similarity of color which is dusky and shimmering at the same time. It is naturalistic and informal. This "look" includes the thousands of species native to California. It is a flora that

fits and suits the landscape. I discovered the particular elegance of the **Eriogonum grande var rubescens,** the Red Buckwheat, in its blooming state, and in its dry dormant state. I also rediscovered the beauty of the **Iris Douglasiana** which is easy to grow, drought tolerant, and blooms spectacularly during the spring.

This excitement for the California "look" was continued by Bob Perry. He talked about his — and I thought — beautiful and philosophical approach to understanding the environment. "Landscapes should be given the rights of livingness." It is materials and resources — the topography and plant material in conjunction with the climate. He stated that his approach to garden design is to attempt to "knit the rocks together." He believes that a design fails if it "creates" an environment, or "fictionalizes" the design by adding elements that the resources cannot bear. Water-loving plants and lawns in a drought summer climate would be such a failure. California has a rhythm: a Mediterranean climate that is sunlit in spring and summer, hot and dry in fall, with rains in winter. He has designed achillea lawns, purple (**echiums**) and gold (California Poppy) hillsides, and garden ceilings (olive trees) with dramatic results.

I began to realize the garden aesthetic for California from these lectures. It became textural profusion of earthy colors in an informal free setting.

But there was more to the Symposium than California. The inspiration of the garden artist was explored through the works of Beatrix Farrand. Since I had just visited Dumbarton Oaks this past summer, I knew the complexity of the work, and appreciated seeing the use of these techniques. Eleanor McPeck pointed out Ms. Farrand's elements of design which have become her trademark. These are English park lawns, formal settings, and tall trees. These elements are not usual today, because of our smaller gardens. However, she incorporated informal natives into her enclosed intimate garden rooms, and she used the views of distance to excite one's curiousities to go beyond — a design technique most of us gardeners use.

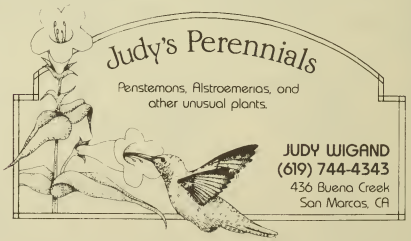
Inspiration comes from England when it comes to the Mixed Border design. The gardeners of today have to thank Gertrude Jekyll for her innovations, particularly bringing "good designs to smaller spaces." She reevaluated the traditional European designs and introduced many of the Mediterranean plants to the gardens of England. She was followed a few years later, in the '40's, by Margery Fish whose free cottage garden style broke the garden formality mode. There was Lanning Roper, an American living in England, who designed town gardens, and brought back the potage which is the vegetable and flower garden intergrown. His sensitivity to the colors and atmospheric light of foggy England brought about some gorgeous color combinations for the flower garden — soft pinks and yellows. These colors would be lost in the bright sunlight and broad fields of California where vivid oranges and reds can be massed. Jane Brown did an excellent job in describing these designers from the past, and relating them to California designs.

One of my goals in attending the symposium was to discover new, or uncover old plants that would work in my garden. Mr. John Elsely, who was once a botanist at Wisley and is now responsible for plant introductions at Park Seed and Wayside Garden, spoke about those new or rediscovered plants. I know I will try **Achillea 'paprika'**, a lovely rust colored bloom, and **Gomphrena 'Strawberry Fields'**, a true red flower that is good for cutting. A list of slides was invaluable because I probably would have forgotten much that was presented. I also have a list of ferns that I like, and am sure that they will grow in my semi-tropical garden. **Adiantum pedatum subsp. aleuticum** is one that will grow in a sunny location, does not require a special moist spot, and has lovely bronzy new growth. There are some dwarf rock ferns too, such as **Athyrium Filix-femina 'Minutissiumun".**

After all the lectures and private garden tours where I wandered through with my camera, I was ready to go home. I enjoyed it all. I carried home a suitcase full of plants.

My final thoughts on collecting these plants and ideas from The Mixed Border Symposium and transporting them to Southern California: My garden wil never look like the English country estate designed by Miss Jekyll, or the woodsy East Coast park of Ms. Farrand, or even have the lushness of green from the Northwest states. My garden will have a character of its own, because I've not limited myself to growing only what is popular. Even following the trend toward drought-resistant plantings will not satisfy. I like to experiment with plants to see how they will grow in my garden. My ideal landscape is definitely the "mixed" border.

In the fall of 1987, the first Symposium was held. The 1988 Symposium followed a similar pattern. About two hundred people attended sessions over the three day period. During that time there were also plant and book sales, and garden tours of the U.C. Arboretum and local gardens. This meeting was a great resource for the garden designer and an plethora of practical information for the practitioner. It is likely that there will be another Symposium next fall. Watch for notices in gardening magazines.



Phalaenopsis

By Robert D. Horwitz

Phalaenopsis, also called the Moth Orchid, has had a reputation for being difficult to grow in a home garden. True, the environment needs to be tropical in nature, but that can be provided in areas along the southern California coast. The plant requires temperature ranges that do not go below 60 degrees Fahrenheit, and do not exceed 85 degrees for any length of time. This means that they can be grown to flower if you are willing to have them in the house and in the yard in order to meet those temperature requirements. The indoors location should provide plenty of light without direct sunlight, such as can be had in south facing windows in the winter. Out of doors, they need mostly dappled shade, as provided by the foliage overhang of a well leaved tree.

During the summer, the temperature range in San Diego coastal areas is ideal for this epiphytic orchid. The night-time temperatures are above the minimum, and the day time temperatures are nominal. Only when a Santa Ana condition occurs, do you have to give them special attention. Put them in a cool garage, or in the bathroom, until temperature and humidity return to normal.

Phalaenopsis grow in a rough fir bark medium. They require lots of water to maintain the humidity requirements suitable for the welfare of the plant. Place the plant container in a shallow basin that has been filled with gravel and small amounts of water, in order to maintain humidity, especially when the plant is in the house. Pour off the excess water after watering the plant.

To extend the blooming of the **phalaenopsis,** examine the flower stalk. Initially, one or two blooms will emerge as buds, blossom, then fade. The flower stem, however, remains vigorous. After blooming has been completed, and the flowers are removed, examine the stem for nodes. Cut the stem two or three inches above the two flower node part. Fertilize and maintain sufficient temperature gradients. A new flower stem will appear from the old flower stem, and after several months will bear new flowers. This cycle can be repeated several times. When the flowering stems no longer respond to the flower-pruning, cut the stem away totally. Fertilize again, and in summer a new crop of leaves and flowering stems will appear.

This plant needs expertise and careful care both in temperature control and in fertilization. Try them as they are not expensive, and the beauty of the flowers and the exotic qualities of the plant are rewards in themselves.

Story and illustration by Robert D. Horwitz. Bob Horwitz is a retired aerospace engineer with a big garden.

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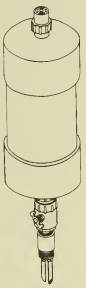
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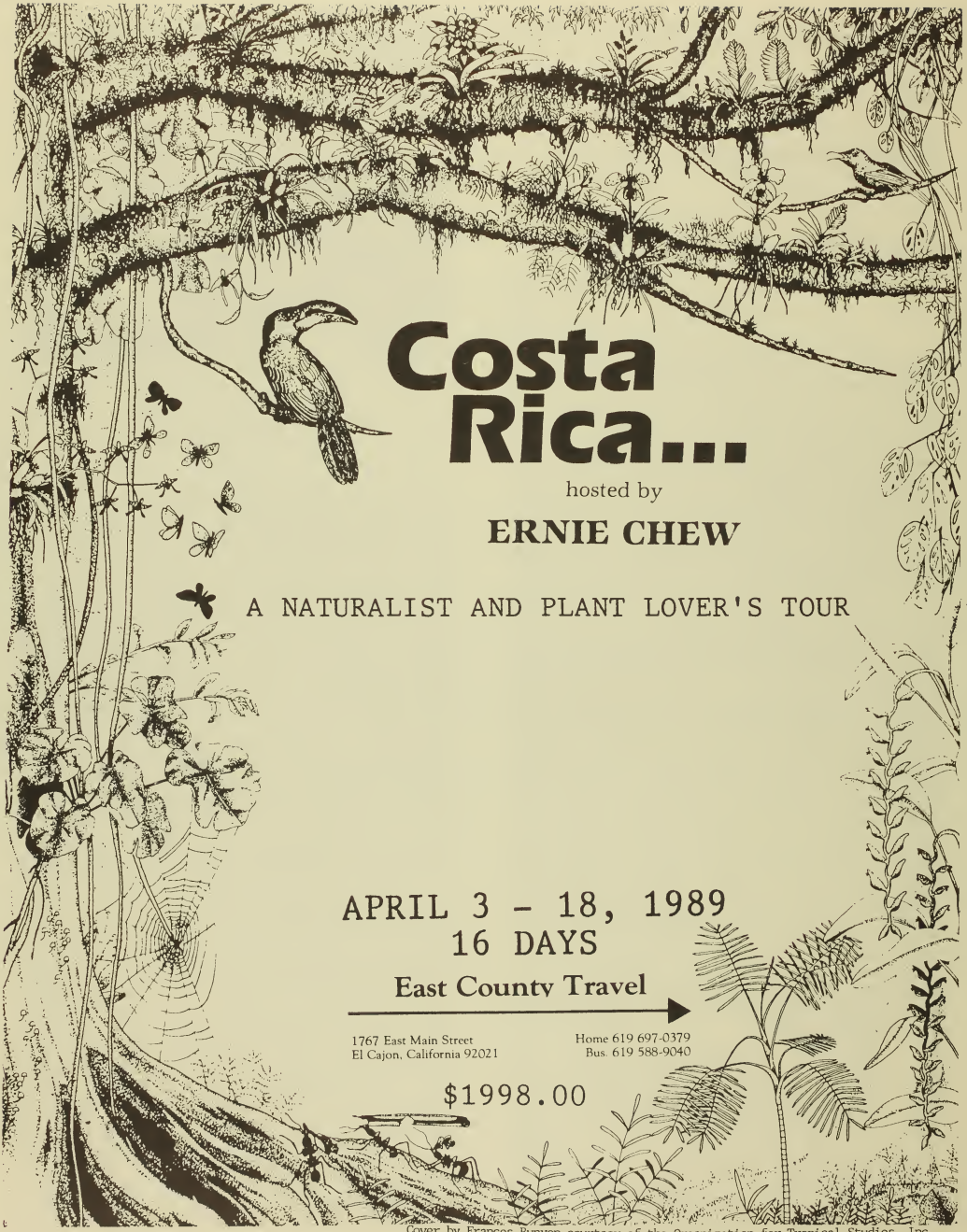

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The Stone-Mimicry And Windowed Mesembry Anthemums

Argyroderma, Conophytum, Dinteranthus, Gibbaeum, Lithops

By Dorothy Dunn

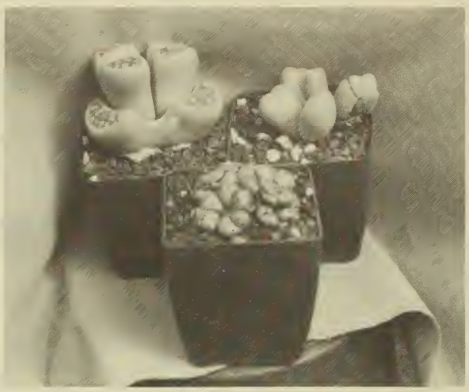

PHOTO BY WILBUR GLOVER
Left rear — Lithob Schwantesii
Front — Conophytum Nivelli
Right rear — Conophythum Elishae

These amazing South African leaf succulents belong to the **Mesembryanthemaceae,** which is one of the largest groups of succulents in the world, consisting of more than 150 genera and well over 2,000 species. They possess some of the most intriguing plant forms imaginable, and have perfected the devices of protective coloration, imitation, camouflage, and moisture retention to the highest possible degree. Because, in general, they inhabit the driest parts of South Africa, where rain may not fall for a period of two years or more, and where they are exposed to intense, dessicating sunlight, they have adapted themselves in a number of ingenious ways to compensate for the shortcomings of their environment. They have reduced themselves to one or two pairs of thick, fleshy leaves to serve as water reservoirs; they have become nearly round in shape to contain the greatest volume of moisture with the least possible surface exposed to evaporation; they have learned to "lie low" in the long months of drought with their new growths wrapped in a papery envelope of old leaves, or buried in the soil with only the leaf tips exposed. And to compensate for burying themselves in this way — which puts their breathing pores and chlorophyll cells underground, where air and sunlight cannot reach them — they have learned to transpire through their sides and to admit sunlight to their green cells within through translucent windows developed in their leaf tips exposed above ground. However, the most remarkable aspect of these plants is their ability to camouflage themselves, take on protective colorations, and so perfectly mimic their natural surroundings that — especially in their dormant states — they are virtually invisible to the unpracticed eye.

The genus **Argyroderma** contains about ten species, with a somewhat limited distribution within the Vanrhynsdorp district, Cape Province, where they may grow in the nutritious but often saline, soft, spongy clay common to the region, or among white quartz rocks. They may receive a fairly good winter rainfall, but are fully exposed to the elements in the dry, hot summers. It is a genus of unusual variability; the seeds from one capsule can produce plants with white, yellow, or reddish-purple flowers. Some species have been known and cultivated for over 200 years. The name **Argyroderma** means "silver skin", and plants should be grown in the full sun to bring out the silvery color.

Conophytums are among the smallest of the **Mesembryanthemums,** ranging in size from that of a small pea to that of a large almond. However, they are among the easier ones to cultivate. The genus consists of about 300 species, plus innumerable varieties. Though this is one of the larger genera of the **Mesembryanthemaceae,** it has a comparatively restricted distribution; the densest concentrations are to be found in Namaqualand and the Richtersveld, where several species may sometimes be found on one hill. Almost all species occur within the winter rainfall areas, and the majority grow on mountains, often near the summit which gets the most rain. Others grow on sand flats under the protection of bushes, or on eroded low granite banks or in hollows or crevices of rocks. Some grow in the driest, sunniest situations possible, while others occur in considerable shade and often embedded in moss. They seem to have solved the problem of combining the minimum amount of evaporating surface with the maximum amount of watery contents. Each growth produces only one flower each year, which lasts several days. Some are pleasantly scented, with an odor somewhat like cloves, and the flowers often have a much greater diameter than the growth bearing them. As with **Lithops, Conophytums** go through a very distinct and obvious resting period. The symptoms of "resting" include fading of healthy coloring, followed by shrinkage. Greadually the plant appears to be shriveling, and the skin becomes wrinkled and turns to a whitish, gray, or brown color. Death appears imminent, but do not despair — and do not throw the plants out! With the onset

of fall and cooler temperatures, new growth and flowering commences almost overnight.

This genus is divided into three distinct groups: (1) the globose, obconic, or obovoid growths with the orifice nearly level with the top (this is the typical group of the genus); (2) the **Biloba** section, in which the growths are either distinctly two-lobed or sharply-notched at the top; and (3) the **Fenestrata** group, where the tops of the growths are divided by a transverse fissure into two broad lobes with flattened or convex (but not keeled) tops which are more or less pellucid, serving as windows to the body of the plant. In cultivation **Conophytums** seem to be happier with some light shading, especially in summer when they are dormant. Most have a fairly shallow root system, and will form large clumps with age.

Dinteranthus are generally found in quartz fields in the northern Bushmanland, the Prieska and Kakamas districts and the region south of Warmbad in South West Africa. These regions may receive both summer and winter rains. They need to bake in the summer sun to bring out their beautiful pink-gray colorings. The genus is named for Professor Dinter, a well-known South African botanist, and contains only six species.

Gibbaeums occur only in the Little Karroo, growing in very saline and alkaline heavy clay soils or among quartz pebbles on plains and low hills. They are easily distinguished from the other stone-mimicry plants by the usually unequal length of the two leaves, giving them a characteristic, oblique appearance sometimes described as a shark's head. They owe their apparent whiteness to a close covering of microscopic hairs which enables them to blend in with the white quartz slivers among which they often grow. There are 21 species in the genus.

To many, the most fascinating of all windowed and mimicry plants are the **Lithops.** They are all very small, cylindrical or conical plants, averaging only an inch or an inch-and-a-half in height, and consist simply of a pair of closely-united, fleshy, flat-topped leaves separated by a cleft. They grow in extremely hot, dry areas with each particular species resembling or mimicking the surrounding rocks, stones, or pebbles so perfectly that the common name "Living Stones" is literally true. In their natural habitat they grow quite closely withdrawn into the soil so that only their distinctively marked "faces" show. In cultivation, however, they should not be so deeply buried as this can promote rot in our more humid, unnatural conditions, and the plants will tend to "self-adjust" to varying light conditons. **Lithops** have a much wider, more diverse geographical distribution than the four previously-mentioned genera. The only condition the various localities of **Lithops** have in common is the extremely arid state under which these plants grow. Otherwise they are found in every conceivable position on mountain tops or plains, in stone, sand, or clay, under bushes, or more often in the open, in acid or alkaline soils, or wedged in cracks of solid bedrock.

All of these plants follow the same general pattern of flowering, seeding, then going dormant and withering. The plant bodies whiten and shrivel, then break open and produce a fresh pair of leaves which forms the new plant body for the coming year. During the dormant or "resting" stage — usually our summer — the plants should be kept fairly dry. When new growth commences, generally around mid-September, watering may be resumed.

The fruit of the **Mesembryanthemums** is a five-sided capsule with an ingenious system of valves to regulate its opening. Unlike most seed pods, which open when dry, the **Mesembryanthemums** open only when wet. Because the area they inhabit often receives no rain for two or three years, this "water-operated" relaease mechanism ensures there will be enough moisture for germination when the seeds fall to earth.

Light conditions in southern Africa vary from bright along the coast to vividly intense in the interior. For the purpose of cultivation this is one of the prime factors to be taken into account, along with excellent drainage. Although these plants grow in a variety of soils in habitat, the one thing they have in common in all localities is a tremendous concentration of such vital minerals as phosphate, potassium, calcium, magnesium, iron, and various trace elements. On the other hand there is almost always a conspicuous and excessive lack of nitrogen, and often a total absence of organic matter.

Literature cited:

Cactus and Succulent Journal of America: various issues

Chidamian, Claude
The Book of Cacti and Other Succulents
pp. 104-119

Haselton, Scott
Succulents for the Amateur

Higgins, Vera
Succulents in Cultivation

Jacobsen, H.
Lexicon of Succulent Plants

Rawe, Rolf
Succulents in the Veld

Storms, Ed
Growing the Mesembs

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Using Household Waste Water On Plants

Division of Agriculture Sciences
University of California Leaflet 2968

Submitted by William E. Lovvorn

If, in a drought crisis, you no longer have fresh water to irrigate outdoor plantings, can you use dishwater, bathwater or laundry water without hurting the plants?

Yes, if you use reasonable care.

But, first, a warning: Household wash water — also called "graywater" — contains food residues and other organic matter that may attract insects and rodents. It also may contain bacteria and viruses that could cause illness. Public health officials have indicated that it may be used for home irrigation — but only in localities where no other water is avalable for that purpose.

Here are some guidelines: (1) The safest household use of "graywater" is to flush toilets. (Don't put it in the tank; pour it directly into the bowl.) (2) Don't let it touch the edible parts of plants. (3) Use it only as a temporary measure during a water shortage crisis.

In any case, check with your local health and building officials before making any use of "graywater."

EFFECTS ON PLANTS

Household wash water is much better for plants than no water at all, but there are possible problems. If your home does not have a water softener, your bathwater and rinse water from dishes and laundry are all of good quality for irrigation. Soapy wash water from dishes and laundry might better be saved to flush the toilet, but can be used for irrigation if you're careful about certain possible problems. (See below.)

If your home does have a water softener, your household wash water contains more sodium than it would otherwise, but it is still usable with some precautions. Over long periods of time — months, at least — sodium may cause soils to become "tighter" and resist water penetration. If necessary, you can counteract this by mixing gypsum (up to 1/4 pound per square foot) into the soil surface.

In addition, you might make the watering basin on only one side of a tree or shrub bed. In this way, a smaller area will be affected by the sodium and the water still can be used effectively by trees and shrubs.

Soapy wash water from dishes or laundry will help keep plants alive in an emergency, but you should be aware of certain possible problems.

Chlorine. Bleaches commonly contain chlorine which can damage plants, particularly if it touches the foliage. (One symptom of damage is a tendency for new, expanding leaves to appear bleached.) If you plan to irrigate plants with wash-cycle laundry water, it would be safer not to use a bleach. If that isn't practical, use as little as possible and let the water stand overnight before irrigating with it.

Boron. Many laundry products contain boron compounds. Some have fairly high levels which can be toxic to plants. (Plant damage from excess boron first shows up as "burning" of the leaf edges.) You won't be able to determine the boron content by reading the label on the container, but look at the trade name. If it sounds somewhat like "boron" or "borax," the product probably contains a significant amount of boron. In any case, if you use the water for irrigation, avoid packaged softeners that are added directly to wash water. These products probably contain either boron or metaphosphates, or both. The sodium in the metaphosphates tends to seal up the soil; the boron may accumulate enough to become toxic to plants.

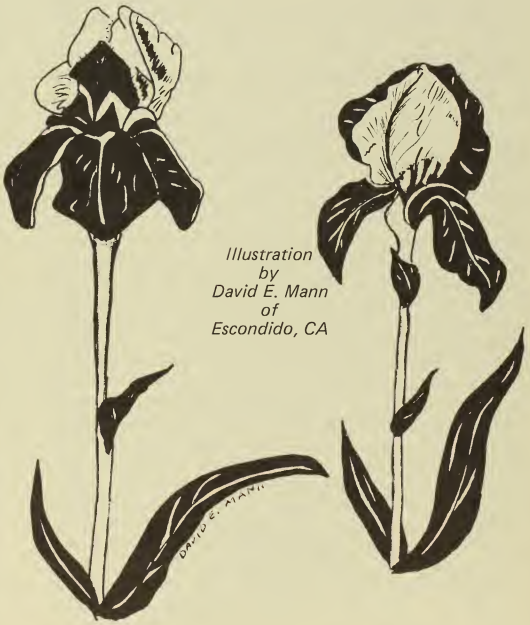
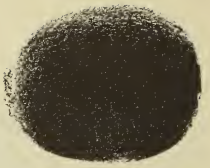


Illustration by David E. Mann of Escondido, CA

The Incredible, Edible Green Fruit



By Melba Davis
California Association of Nurserymen

With the increase desire for the public to try the different foods available from around the world, the kiwi has become a popular fruit. With its brown, fuzzy outer skin and the beautiful bright green insides decorated with tiny, tasty black seeds, it is as much used for its appearance as for its taste.

Whether you know this plant as the kiwi, yang-tao, or Chinese gooseberry, this flowering deciduous vine is a beautiful addition to a yard. Raising the kiwi to produce fruit is not too difficult but does require male/female plants, plenty of room and very sturdy support. The vines themselves easily can reach 30 feet in length and the fruit produces heavily on year-old wood. Commercial plantings use 4x4 posts and heavy wire between the posts.

As the leaves emerge, they and the stems seem to be covered with reddish hair. As the leaves expand into heart-shaped roundish leaves, woolly white hairs seem to cover the underside. Beautiful creamy, yellow flowers in clusters appear around May and turn more of a yellow color as they age and then fade. Female plants will then produce huge clusters of the brown, fuzzy fruit dangling from almost every inch of the plant.

To produce fruit you need not only male/female vines, but the temperature range must be correct. They do well in most soils, though it should be well drained. Temperatures range from the need for hot summers to cool spring and fall temperatures. Ideally, the plants should have at least 600-800 hours of temperatures below 45 degrees. You can raise kiwi as a beautiful vine addition to your arbor or wall without having fruit. The flowers themselves make this a worthwhile choice.

Your local professional member of the California Association of Nurserymen can provide you with the best varieties for your area and needs.

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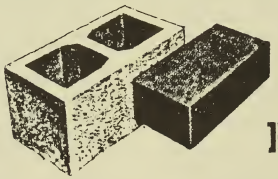

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Thimble Gardening With Miniature Plants

Begonia

Sooner or later it happens to all plant enthusiasts. You "discover" a new intriguing plant and suddenly become determined to collect other varieties from the same plant family. It happens to me regularly, and there comes a point when I'm faced with a problem: running out of space to display the plants. I am sure that many of you plant-lovers have at one time or another had to cope with this, but I've found a solution!

After discovering there are so many types of miniature plants, I now grow many of my favorites in miniature form. These delightful plants need amazingly little space.

Miniature plants are, simply, plants that grow in miniature form. To give you some examples: **African violets** (upright growing varieties as well as trailing ones), **Sinningias** (also known as **Gloxinias), roses, geraniums, begonias, orchids, ivies** and **fittonia.** Many of these can be found in plant stores, but you may have to search a little.

The most popular houseplant, the **African violet,** has numerous minis in its family with blooms in many different colors, like purple, pink and shades thereof.

Miniature **begonias** are very attractive, and one you should look for is the "eyelash Begonia" **(Begonia bowerae).**

Miniature **ivies (Hedera)** are ideal trailing plants for a bottle garden or a terrarium, but can also be grown as small hanging plants. The one that comes to my mind is the 'Needlepoint Ivy'.

Miniature roses can be found in the plant stores, garden centres and nurseries at regular intervals and come in a wide variety of colors including yellow, pink and white. They are hard to resist. Some have blooms the size of a baby's nail. Under fluorescent lights, they will bloom almost all year round. They require high humidity, otherwise leaves will fall off and buds may not open.

A real jewel is the miniature Grape Ivy (**Cissus striata**), which occasionally shows up in some plant stores. The nerve plant, or **fittonia** has a mini in its family; it has silver nerves and is ideal as a terrarium plant, because of its need for high humidity.

The waxplants or **Hoyas** also have at least one mini in their family: the **Hoya bella**, a pretty hanging plant that under the right conditions (high humidity, bright light, no direct sun) will reward you with fragrant white flowers.

There are also a couple of mini Peperomias, one of the easiest houseplants to grow: the **Peperomia Pixie** and the **P. prostrata.** They also enjoy above average humidity and do not require a lot of light.

If you like fruit-bearing trees, try a miniature pomegranata (**Punica granatum nana**). Their lovely orange flowers will develop in lots of light, a few hours of sunlight, good humidity, and lots of regular plant food, after which the flowers develop into small fruit.

Some plants may be hard to find locally, but with some persistence, they can be obtained. Some of these are: minature Geraniums, and bulbs such as the daffodil and iris. There are also now mini Cyclamens, which you will find in many Chinese grocery stores that sell plants.

You can also make up an interesting miniature garden using a collection of tiny plants attractively grouped together in a small bowl, a planter, or a glass terrarium. By combining upright growing plants, trailing groundcovers, and a few blooming varieties, your mini garden can be quite exciting.

Outdoors, you can combine several small succulents such as **Sedum** and **Echeveria** in a wooden box planter, which can be taken inside before winter.

Remember that plants in small containers need more frequent waterings, never allow the soil to dry out, and check it every day.

Tineke Wilders is a freelance garden writer, broadcaster, and consultant living and gardening in San Diego.

Exhibit

Art Exhibit: "Southern California Gardens"
Botanical Drawings by Irina Gronborg
Date: January 10-February 10, 1989
Place: U.S. National Arboretum
3501 New York Avenue, N.E.
Washington, kD.C. 20002
Monday-Friday 8:00 a.m.-4:30 p.m.

The U.S. National Arboretum is pleased to present an exhibit of botanical art representing four of Southern California's most popular public gardens. Botanical artist, Irina Gronborg, in conjunction with the Huntington Botanical Gardens, the Los Angeles State and County Arboretum, Quail Botanical Gardens, and the San Diego Zoological Society, has selected three plants from each garden to represent the rich, horticultural collections of Southern California.

The magnificent, turn-of-the century San Marino estate of railroad millionaire Henry E. Huntington has become a series of perfect gardens which showcase eighty-five years of successful experimentation with the introduction of exotic plants. The 130 acre Huntington is particularly famous for its palm and cactus collections.

The mandate of the 111 acre Los Angeles State and County Arboretum is "to serve as a center for the dissemination of knowledge concerning the exotic plants that will grow in southern California." The Arboretum's efforts can be seen in the many, now common, flowering trees and shrubs that landscape the southland, from Santa Barbara to the Mexican border.

Thirty acre Quail Botanical Gardens has redirected its focus to middle American plants due to the increasing conservation need, proximity and climatic suitability. This new emphasis is coordinated with its existing collections of bamboos, palms, tropical fruits, and desert plants.

The 100 acre San Diego Zoo is San Diego's leading tourist attraction. Its lush, mature plantings constitute a number of carefully designed ecosystems. The greenery provides a natural backdrop and diet for the animals as well as a habitat for plant conservation. The San Diego Zoo is renowned for its fine palm and cycad collections.

Irina Gronborg is a botanical artist whose work is widely published and exhibited in southern California. Her art is rooted in the great tradition of fine botanical drawing of detailed and color correct description. Ms. Gronborg is a member of a number of horticultual societies, and with her husband, Erik, a fellow artist, maintains a large, exotic home garden. Each of these drawings in color pencil is done directly from the living plant. She received her degrees in studio art from Stanford University and currently teaches drawing and botanical illustration at the University of California San Diego. She is represented by J. Dewers (San Diego), Knowles (La Jolla), Biota (Los Angeles) and Phyllis Hattis (New York City).

Hemerocallis 'Ruby Throat,' 'Stoplight' 'Open Hearth'

Research and wall sheet writings were done by Alison Voss. Ms. Voss is a botanical writer and editor, and an Associate of the San Diego Natural History Museum. She is the founder of the Quail Botanical Gardens Docent Society, and a member of a number of horticultural associations. Ms. Voss lives in Quail Botanical Gardens with her husband, curator Gilbert Voss.

Come to the Floral Meeting on Feb. 21 to hear Irina Gronberg and see her art work.

You are invited to join the California Cherimoya Association (CCA) which is made up of Cherimoya growers, marketers, and other interested parties. Membership is $30.00 per year. For further information, write to: California Cherimoya Association, P.O. Box 4818, Saticoy, CA 93004.

Reviewed by Barbara S. Jones

GROWING CARNATIONS by Joy Jorrott. Kangaroo Press, Australia. (distributed by I.S.B.S. Portland, OR 972133. 1988. 80 pages, 7" x 9", softcover, $12.95.

Carnations are the second most popular flower in the world. This book, illustrated with 101 color photos, offers information on soil, cultivation, watering, feeding, propagation, etc. plus discriptions of named varieties. A brief history of the plant and advice on showing and prolonging the vase life are included.

Although the book is written for Australia, much of the information will be useful for southern California growers.

DAHLIAS by Philip Damp. 1988. The Globe Pequot Press, Chester, CT 06412. 96 pages, 8 3/4" x 10 1/2", hardcover, $18.95.

Dahlias is one of the Classic Garden Plants Series books. Dahlias were one of the favorite San Diego flowers at the time California Garden began. They have been featured in flower shows for many years.

Although this book is written in England, and our soils and climate are different, there is information which could be interesting to local growers.

CLIMBING ROSES BY Christopher Warner. 1988. The Globe Pequot Press, Chester, CT 06412. 1988, 144 pages, 8 3/4" x 10 1/2", hardcover, $18.95.

Climbing Roses is one of the Classic Garden Plants Series books. Rose enthusiasts will find this book of great interest. For some reason, climbing roses have not been as popular as other forms. This book gives step-by-step instructions on the cultivation of climbers and has many excellent color photographs and line drawings. This book could inspire one to have a "rose climbing 'round the door."

The book is written in England so soil and weather conditions are different, and growing information may not apply to San Diego.

AZALEAS by Christopher Fairweather. 1988. The Globe Pequot Press, Chester, CT 06412. 144 pages, 8 3/4" x 10 1/2", hardcover, $18.95.

Azaleas is one of the Classic Garden Plants Series books. This beautifully illustrated book is written by a renown azalea expert.

Azaleas can be easy to grow. This book gives step-by-step instructions on growing single container plants, and on whole gardens. Individual plants are described and there are lists of gardens, societies, and nurseries which specialize in azaleas in the United States, and in England.

San Diego's soils and climate are different from England, so some cultivation information may need to be modified.

GARDEN FLOWER FOLKLORE by Laura C. Martin. The Globe Pequot Press, Chester, CT 06412. 1987. 256 pages, 7" x 10", hardcover, $19.95.

In this book the histories, descriptions, and growing needs, as well as the legends, myths, and superstitions, are given for 100 garden flowers. It is illustrated with pen and ink drawings, and watercolors, and is printed in two colors. There is useful information on how to dry, press, pickle, and condition cut flowers. The 'how to' of making dyes from flowers and floral calendars, and period garden designs are covered.

This is a lot of little special subject books condensed into one book. It is a 'Fun' book to read. And, think of all the little-known-facts you will be able to add to your next conversation with a garden friend if you read it!

WILDFLOWER FOLKLORE by Laura C. Martin. The Globe Pequot Press, Chester, CT 06412. 1984, 256 pags, 7" x 10", hardcover, $18.95.

This is an expanded version of her earlier book. It is an attractive book, printed in two colors, with illustrations by Marguerite Chase Dreyer of the 101 wildflowers discussed.

The flowers, with all of their common names, as well as the scientific names, are briefly described. Histories, legends, superstitions, magical, and medicinal properties are given.

This author, who has a university degree in Botany, is a delightful story-teller. The book is full of intriguing information.

THE WILDFLOWER MEADOW BOOK: A GARDENER'S GUIDE by Laura C. Martin. 1986. Fast & McMillan, Charlotte, N.C. 28203, distributed by the Globe Pequot Press, Chester, CT 06412. 304 pages, 7" x 9¼", hardcover $18.95, softcover $12.95.

This book, written in cooperation with the American Horticultural Society, is an informative guide for planting a backyard or a public meadow of wildflowers. "Landscaping with native plants is a manifestation of our common sense as well as our aesthetic sense . . . native plants are . . . suited to the climate, soils, and growing condition of the region in which they evolve . . . "

Plants, their names, growing information, use, etc. are explained in this well-written book. With the current interest in native plant usage and in water conservation plantings, this book will be very helpful. It has sections on our area.

Pronunciation

By Harold S. Berg

Are those marks and symbols necessary? Usually we expect to see all kinds of diacritical marks and symbols on letters to help us pronounce plant names and descriptions correctly. But are they necessary? If we put aside our desk copies of Funk & Wagnalls or Webster's, we may "progress" to simpler systems.

A small step toward simplification was made in 1939 by the Florist's Publishing Company in a pronouncing dictionary which limited use of diacritical marks to twelve. According to the foreword, "several hundred thousand copies" later, it is still used by nurseries as well as the general gardening public.

Then a giant step toward simplification was made by Ralph Bailey when he brought out a small pronouncing dictionary in 1948. No diacritical marks or symbols here. He relied on phonetic (fo-net-ik) spelling, but he did condescend to italicize the stressed syllable.

Finally, we note that the Reader's Digest Association also used phonetic spelling. A recent example was a two-paragraph explanation of botanical Latin in a book on medicinal plants published in 1986. Instead of italics, the accented syllable was capitalized.

Compare these annotated examples for ease of learning pronunciation. The first is Bromelia, Latin for a genus of tropical plants. The second is recurvata, meaning "bent backward."

1. Use of diacritical marks:
bro-me-li-a. Four marks required. Dash (macron) on the o and the e. Accent mark after the e. A dot over the e. A dot over the a.
re-ker-va-ta. Four marks required. A curved line (tilde) over the second e. Dash (macron) on the first a. An accent mark after va. A dot on the last a.
2. Use of phonetic spelling with capitals or italics.
broh-mee-lee-uh. Capitalize "mee" or underline for italics.

From the reader's point of view, the pronunciation of phonetic spelling is more quickly transferred to unfamiliar plant names and descriptions. From the editor's point of view, using phonetic spelling avoids more expensive formats added to either type -- writer or computer-word-processor.

Phonetic spelling is not a style for the purist certainly, but one for the writer/editor who would carefully observe the authority and guidance of Webster's Unabridged Dictionary. In a word, phonetic spelling, as a key to pronunciation, will be understood, and that is our aim in communication.

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REFERENCES IN THE ORDER MENTIONED:

1. New Pronouncing Dictionary of Plant Names, Revised 1964. Florist's Publishing Company, Chicago, IL.
2. Bailey, Ralph., The Self-pronouncing Dictionary of Plant Names. Revised 1962. The American Garden Guild, Garden City, NY.
3. Magic and Medicine of Plants, 1986. The Reader's Digest Association, Inc., Pleasantville, NY.
4. Webster's New International Dictionary, Second Edition, Unabridged, 1950, G.C. Merriam Co.

Harold Berg is a Master Gardener and editor of their newsletter.

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California GARDEN

NOW IS THE TIME...

A CULTURAL CALENDAR OF CARE FROM OUR AFFILIATES

Compiled by Penny Bunker

BEGONIAS Margaret Lee

keep plants cleaned up.
remove dead leaves from plants.
watch watering — make sure the plants do not become too dry.
add more mix to pots as needed to keep roots covered.
spray for mildew; control snails and slugs, and spray for mealy bugs and loopers.
start tubers for bloom later in the year.
start cutting back lightly on cane and shrub types toward the last part of the period.

BONSAI Dr. Herbert Markowitz

watch watering — do not overwater.
use dormant spray such as copper, oil, or lime/sulphur mixtures, particularly on maples, quince, and other deciduous trees after they have been pruned.
graft evergreen trees as well as conifers in January; the deciduous trees in February.
watch for aphids and other sucking insects; spray accordingly.
refrain from fertilizing your trees.
protect plants from too much moisture during rainy period, but do not allow to dry out.
prune fruit-bearing bonsai.

BROMELIADS Mary Siemers

protect your outdoor plants from freezing temperatures by covering them with sheets, newspapers, etc., or bring them indoors, making sure not to place them in front of a heating vent or a drafty area. Plants left outdoors do best if kept 2 or 3 feet above the ground.
remember to provide some sort of humidity to plants when kept indoors. May spray entire plant once or twice a week when replacing the water in center cups to keep them from becoming stagnant.
always provide good drainage.
never allow the potting soil to become soggy.
empty water from outdoor plants when it has rained consistently for one or two days. Weight from too much water may cause their leaves to spread apart and affect their form.
do not fertilize during cool months.
give plants adequate air circulation by not keepng too close to each other; will help keep plants from getting scale.

CACTUS & SUCCULENTS Joey Betzler

allow winter dormant plants to rest and keep the winter growers happy. Be careful with water and fertilizer. As it gets colder, water in early part of a sunny day; if it looks like rain — hold off on water.
protect outside plants from excessive rain if possible. If it is to frost, a piece of paper or plastic can save a plant from turning into a mass of soggy pulp. (Do not forget to remove cover when conditions become more favorable.)
water new cuttings; they may not root as fast. If you can supply bottom heat, you should not have a problem.
watch seedlings — fungi can be a problem at this time.
use snail and slug control.
clean old pots, and pick up leaves and other debris.
watch for rodents and control them — they can ruin your collection.
check those plants you might wish to propagate next growing season, and find out how to make new starts.

CAMELLIAS E.C. Snooks

feed with a 2-10-10 fertilizer to get better and larger blooms.
treat a few buds with gibberallic acid for larger bloom for show.
select new varieties while they are in bloom.
continue a regular watering schedule; plants must be kept moist at all times, but not wet.
keep plants clean and pick up all blooms to prevent petal blight.
make grafts.
transplant camellias; do not fertilize newly transplanted plants.

DAHLIAS Abe Janzen

dig any tubers left in the ground. By early January the tops should be completely withered. Cut tops just above the ground.
store tubers without dividing — store in vermiculite or sand, leaving on any soil that clings to them. Keep in a cool place.
inspect those tubers stored earlier for any signs of shriveling; if too dry, add a little moisture.
start in February to prepare the planting bed. Turn the soil, add humus, and fumigate. Dig in humus — add equal part of super-phosphate, and sulphate of potash — turn over well. Add fertilizer two or three weeks before planting.
start in February to sprout some selected roots; these make good cuttings. Bottom heat may be applied to encourage sprouting.

EPIPHYLLUMS (Orchid Cactus) Frank Granatowski

feed mature plants with 0-10-10 nitrogen-free or low-nitrogen fertilizer to promote

blooming in the spring. Either liquid or time-release granules can be used. If liquid is used, another application may be necessary in about a month.

prune out dead and unsightly growth to improve appearance and give more energy to newer and healthier branches.

maintain preventative pest control by keeping plant containers free of debris. Spray with insecticides only when absolutely necessary; read and follow directions carefully. (Orthene, malathion, and cygon are available locally.)

bait for slugs and snails. A few granules of Slugetta placed at the base of the plants have proved very effective and leave little or no unsightly residue.

protect from unexpected frost and strong wintry winds.

take advantage of the rains -- collect water for future use. Store in covered opaque containers to prevent infestation of mosquito larvae and build up algae. If plants are potted in porous soil, even prolong heavy rains will have no harmful effect on them.

FERNS Ray Sodomka

water gently, but do not soak. On cool nights soaking keeps their feet too cold. Do not rely on the rain to find your hidden and covered plants; they may get dry.

trim off old fronds in frost free areas.

spray for aphids, especially the maidenhair type.

fertilize platyceriums (Staghorns) with bonemeal, hoof and horn, or a high nitrogen liquid.

remove and remount platycerium pups.

plant spores.

repot, rebasket, and divide ferns in frost free areas.

check for spider mites in underside of fronds. Spray with malathion or miticide.

FUCHSIAS William Selby

protect plants from frost in cold areas.

check plants (pots, baskets, etc.) often for moisture; don't let plants dry out.

fertilize those plants cut back 60-90 days before; new growth needs food.

pot up cuttings taken when pruning done; do not fertilize them for at least two weeks.

keep all plants clean of fallen leaves, blossoms, or other trash.

use insecticides or fungicides if there are problems.

GERANIUMS Carl Roller

water thoroughly when plants become somewhat dry. Allow the excess water to drain away. Keep foliage as dry as possible.

continue feeding with a balanced fertilizer dissolved in water, using less than the recommended amount. Apply as often as needed to keep the plants growing well.

continue a pest control and disease prevention program using all products according to the manufacturer's directions.

prune any plants which have not been cut back. At least one green leaf should remain on each stem of regals, scented, and similar types. Lanky plants, which were pruned early, can be cut back again to produce compact plants. Tip pinch other plants which were pruned in the fall.

make cuttings from the prunings. Shelter the cuttings from extreme weather.

protect all plants from freezing if temperatures go that low.

continue to rotate plants on a regular basis in order to keep them well shaped.

GESNERIADS Michael Ludwig

Prepare pots for spring planting season wash with hot water, and then stand overnight in a clorox solution to kill any disease. Wash thoroughly after soaking and let them dry.

spray for pests and disease. There will be little or no damage to plants which are more dormant in winter. Check for pests to help avoid problems that might occur in the spring.

do not water on cold, cloudy days or in late afternoon, to prevent many problems.

start achimenes rhizomes now. Place them in a damp bed of vermiculite.

repot streptocarpus. Remove last year's flowering leaves and clean up plants; repot to have a better plant.

IRIS San Diego-Imperial Counties Iris Society

make last planting of bulbous iris for spring bloom.

continue a watering program, especially if rains are light.

start a regular spray program with copper oil spray to help control rust.

establish a regular program of snail, slug, and aphid control.

keep old brown fans cut off tall-bearded; good ground cleaning and spraying is helpful in pest control.

start in February to feed all iris with 0-10-10 liquid fertilizer. Follow directions and do not over-fertilize.

ORCHIDS Charlie Fouquette

start shaping plants for Orchid Show that will be held in mid-March (Mar. 17, 18, 19).

check pilot light daily -- small mirror will help.

try to water or fertilize as early in the day as possible to allow plants to dry out by night.

dry out the unusual New World orchids. Sometimes winter is the driest time of

the year in the Southern Hemisphere. Consider the origin of the plants, high, low, wet, dry. Plants like oncidiums, catasetums, lycaste, etc.

watch for sudden temperature drop and check vents, heater fittings, clogged openings, clogged flues, etc. Now would be a bad time to lose flowers from a show plant.

stake cymbidium spikes — don't rotate pot.

give noble dendrobiums some cool time just mist, buds should be developing, water and fertilize after buds have matured.

remember in almost all cases, if you use fir bark as a potting medium, you should use a higher nitrogen proportion in your fertilizing solution. Fir bark uses nitrogen as it breaks down. Use a 30-10-10 formula. Other medium, can use 18-18-18 or 20-20-20 PH adjusted.

check moisture in pots of outdoor growing orchids; don't be fooled by overcast days; plants will still dry out.

do last repotting on phalaenopsis before spring sets in; some will be in spike — be careful and return pot in same place and orientation on bench.

ROSES Frank Hastings

prune roses. (For those near San Diego, watch for dates of demonstrations of pruning roses in Balboa Park).

finish major pruning jobs to promote new cane and basil growth by removing old canes and twiggy growth.

follow with garden cleanup, good dormant spraying of bushes and soil around bushes.

clean up all debris and weeds. Spread 2/3 cup gypsum around established bushes, to cleanse the soil of salts, and open up clay soil for better drainage.

loosen up soil with a garden fork.

spread 2 shovelfuls of steer or other composted manure per bush.

apply an organic balanced fertilizer in February. Water the day before fertilizing, and water in dry fertilizer after applying.

keep rose bushes watered twice a week unless 3/4 inch of rain falls.

plant bare-root roses, mixing ½ mulch with your soil. Add 3 cups of bone meal to soil mixture.

GREEN THUMB ITEMS

start planting gladiolus bulbs; make successive plantings at monthly interval for flowers over a longer period.

make marguerite cuttings from new tips. Remove lower leaves and insert cuttings in rooting medium. Keep shaded until rooted.

cut chrysanthemums back to the ground.

plant hybrid amaryllis bulbs, with the tip of nose just showing, in a sunny or semi-shaded area.

plant bare-rooted trees.

prune flowering trees and shrubs. Pruning at this time will shape the plants, and the flowers may be used in arrangements.

spray deciduous trees and shrubs with a combination insecticide and fungicide, such as oil and lime/suplhur, or coppers. Follow directions as given.

continue bait for slugs and snails.

transplant evergreen and dedicuous shrubs.

prune deciduous fruit, nut, and shade trees.

dormant spray your trees now.

plant a grape vine to start covering the patio.

Place a mulch around shrubs, trees and annuals to keep the weeds down. Use compost, manures, leaves, sawdust, straw, or old newspapers, but not plastic.

prune hydrangeas to 2-3 leaf buds above the soil.

Apply fertilizer to get your lawn off to a good start as the weather warms.

Check out crop plants that can be planted at this time, bare root form, or otherwise — strawberries, horseradish, berries of all types, artichokes, onions, rhubarb asparagus, etc. When you plant bare root strawberries, cut their roots back halfway.

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1st Mon. S.D. Zoo, Rondavel Rm., 11:30 a.m.

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San Diego, CA 92120
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Coronado, CA 92118
Twice annually at call of President,
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Coronado, CA 92118
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159 Orvil Way
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Oct., Nov., Dec., St. Peters Church 10 a.m.

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Pres: Mrs. Robert K. Smith 457-3066
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La Mesa, CA 92041, 9:30 a.m.

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3rd Thu 11 a.m., La Mesa Woman's Club
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230 Quail Gardens Dr., Encinitas 2 p.m.

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2nd Wed., Sept—Jun, 3598 Talbot at Canon Westminster Presbyterian Church, 10 a.m.

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7575 Conestoga Way
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4th Tues. Home of members, 9:30 a.m.

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P.O. Box 34341
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San Diego, CA 92104, 11 a.m. Workshop
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876 Armada Terrace
San Diego, CA 92106

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Pres: Pam Kelde 438-9393
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San Diego, CA 92138-3996
2235 Galahad Road, Serra Mesa, 7:45 p.m.
1st Thurs. Byzantine Catholic Church

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Homes of Members

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2nd Mon., Fellowship Hall, Christ United Methodist Church, 3295 Meade, 12 noon

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808 Ethel Place
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1412 Tenth Street
Imperial Beach, CA 92032
2nd Tues., Casa del Prado, 7:30 p.m.

SAN DIEGO GESNERIAD SOCIETY
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3915 Argyle
San Diego, CA 92111
3rd Wed. St. David's Parish Hall
5050 Milton St. 7:30 p.m.

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San Diego, CA 92119

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